

REMARKS

The Office Action dated April 17, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

By this response, claims 1-17, 19, 21-60, 77-92, 96-100, 102, and 104-105 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 106-113 have been added. Support for the above amendments is provided in the Specification at least on page 4 in paragraph [0003]. Accordingly, claims 1-17, 19, 21-60, 77-92, 96-100, and 102-113 are currently pending in the application, of which claims 1, 9, 12-13, 16, 98-99, and 106-110 are independent claims.

In view of the above amendments and the following remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending claim rejections for the reasons discussed below.

Claim Rejections under 35 U.S.C. §103(a)

The Office Action rejected claims 1-17, 19, 21-60, 77-92, 96-100, and 102-105 under 35 U.S.C. §103(a) as being allegedly unpatentable over Purchase, *et al.* (U.S. Patent No. 5,432,838) (“Purchase”) in view of Willars (U.S. Patent No. 6,507,567) (“Willars”). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in the combination of Purchase and Willars.

Claim 1, upon which claims 2-8, 19, 21-37, 41-47, 51-57, 77-83, 96-97, 102, depend, recites an apparatus in a cellular communications network. The apparatus includes a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node. The apparatus also includes a determining unit configured to determine if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter monitored by the monitor. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 9, upon which claims 10-11, 38-40, 48-50, 58-60, 84-86 depend, recites an apparatus in a cellular communications network. The apparatus includes a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node, and a determining unit configured to determine if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter monitored by the monitor. The at least one parameter includes an elapsed time since the last use of the connection. The determining unit is further configured to determine that the connection is to be released if the monitor indicates that the connection has not been used for a predetermined time. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 12, upon which claim 87 depends, recites an apparatus in a cellular communications network. The apparatus includes a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node,

and a determining unit configured to determine if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter monitored by the monitoring means. The at least one parameter includes a state of the mobile station. The determining unit is further configured to determine if the connection is to be released based on the state of the mobile station determined by the monitor. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 13, upon which claims 14-15 and 88-90 depend, recites an apparatus in a cellular communications network. The apparatus includes a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node, and a determining unit configured to determine if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter monitored by the monitor. The at least one parameter includes a movement of the mobile station, and the determining unit is further configured to determine if the connection should be released based on the movement of the mobile station monitored by the monitor. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 16, upon which claims 17 and 91-92 depends, recites an apparatus in a cellular communications network. The apparatus includes a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node, and a determining unit configured to determine if the connection between

the support node and the mobile station is to be released dependent solely on the at least one parameter monitored by the monitor. The at least one parameter includes a location of the mobile station, and the determining unit is further configured to determine if the connection should be released based on the location of the mobile station monitored by the monitor. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 98, upon which claim 100 depends, recites an apparatus. The apparatus includes a processor configured to monitor at least one parameter of a connection established between a mobile station and a support node and to determine if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter. The apparatus is implemented in a cellular communication network. The apparatus is configured to provide the connection between the mobile station and the support node.

Claim 99, upon which claims 103-105 depend, recites a method. The method includes establishing a connection between a mobile station and a support node in a cellular communications network through a radio network controller, monitoring, at the radio network controller, at least one parameter related to the connection between the mobile station and the support node. The method also includes determining, at the radio network controller, if the connection between the support node and the mobile station is to be released dependent solely on the at least one parameter.

As will be discussed below, the combination of Purchase and Willars would fail to disclose or suggest every feature recited in claims 1-17, 19, 21-60, 77-92, 96-100, 102, and 104-105, and therefore fails to provide the features discussed above.

Purchase is directed to a communication system. Purchase discloses a communication system, particularly for a mine, which has a broadband distribution system. Antennas, which may include leaky coax feeders, are connected to the distribution system by interface units. As required, the interface units effect signal level adjustment, frequency translation, and/or modulation technique changes. It is provided for each of the distribution system and the antennas to have separate in- and out- bound broadband spectra, with the antennas typically utilizing different frequency bands from the distribution system. A variety of information, including mobile and fixed radio, LANs, data acquisition systems, and video can communicate over this system (Purchase, Abstract; col. 3, line 9, to col. 5, line 68).

Willars is directed to the efficient handling of connections in a mobile communications network. Willars discloses a first channel established to support a connection through a radio access network to a mobile station. Subsequently, if the first channel is no longer used to support that connection, a portion of that first channel is nevertheless maintained for a period of time. If the first channel is again needed to support the connection to the mobile station, the maintained portion of the first channel is simply reactivated thereby reducing channel switching costs and delays associated with channel set-up and release operations. The portion of the first channel that is maintained

may be associated with resources within the radio access network. Another portion of the first channel, corresponding for example to a radio channel resource supporting the connection between the radio access network and the mobile station, may be released after the first channel is no longer being used to support the connection in order to make that radio channel resources available for other mobile connections (Willars, Abstract).

Applicants respectfully submit that the Office Action failed to establish a *prima facie* case of obvious regarding the rejections of claims 1-17, 19, 21-60, 77-92, 96-100, and 102-105 under 35 U.S.C. §103(a) based on the teachings of Purchase and Willars.

Assuming *arguendo* that the teachings of Purchase could be combined with the teachings of Willars, the combination of Purchase and Willars would fail to disclose or suggest every feature recited in claim 1, and similarly recited in claims 9, 12-13, 16, and 98-99. Specifically, the combination of Purchase and Willars would fail to disclose or suggest, at least, “An apparatus in a cellular communications network, comprising: a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node; and a determining unit configured to determine if the connection between said support node and said mobile station is to be released dependent solely on said at least one parameter monitored by said monitor” as recited in claim 1, and similarly recited in claims 9, 12-13, 16, and 98-99 (emphasis added).

The Office Action alleged that Purchase discloses the aforementioned claim features, citing col. 13, lines 55-58. However, a review of these passages demonstrates that Purchase fails to disclose the aforementioned claim features.

Rather, Purchase merely discloses a mobile voice radio system, particularly for mining (see column 11, line 33, to column 14, line 20). Purchase makes no mention of the radio system being used in a cellular communications network.

Furthermore, as noted in the Office Action on page 3, Purchase discloses that “the radio controller 72 can be used to collect statistics on use of the system” (Purchase, col. 13, lines 55-58). Purchase does not disclose or suggest that the radio controller monitors at least one parameter, such as the inactivity of the communication. In fact, Purchase, at column 13, lines 31-32, discloses that “the controller instructs individual distributed antenna units to check for activity.” Accordingly, the individual distributed antenna units monitor the system activity, while the radio controller merely collects statistics associated with use of the system. Therefore, the teachings of Purchase fail to disclose or suggest, at least, “An apparatus in a cellular communications network, comprising: a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node” as recited in claim 1, and similarly recited in claims 9, 12-13, 16, and 98-99 (emphasis added).

Furthermore, Purchase merely discloses that “inactivity on a radio telephone link would cause release of the link after a programmable amount of time” (Purchase, col. 13, lines 55-58). Purchase does not disclose or suggest that the radio controller *determines if the connection is to be released* dependent solely on the at least one parameter monitored. Rather, the teachings of Purchase imply that the mobile communications device simply switches off to conserve battery power or the individual distributed antenna units, which

check activity of the system, control the release of the link, rather than the radio controller having the control. Therefore, the teachings of Purchase fail to disclose or suggest, at least, “An apparatus in a cellular communications network, comprising: a determining unit configured to determine if the connection between said support node and said mobile station is to be released dependent solely on said at least one parameter monitored by said monitor” as recited in claim 1, and similarly recited in claims 9, 12-13, 16, and 98-99 (emphasis added).

Applicants respectfully submit that Willars fails to cure the deficiencies of Purchase regarding the aforementioned claim features.

Furthermore, Applicants respectfully submit that one of ordinary skill in the art would not have combined the teachings of Purchase with the teachings of Willars because they are non-analogous art. Willars is directed to a cellular communications network system, while Purchase is directed to a mine communication system, which operates on an entirely different concept of fixed frequency communication pathways between the antenna and the mobile device for mining communication. The approach applied by Purchase merely allocates a fixed communications frequency between a pair of devices to overcome the privacy problem associated with standard walky-talky arrangements, e.g. common floor communications systems. Accordingly, one of ordinary skill in the art would not have combined the teachings of Purchase with the teachings of Willars because they are non-analogous art.

Therefore, Applicants respectfully submit that the Office Action failed to establish a *prima facie* case of obviousness regarding the rejections of claims 1-17, 19, 21-60, 77-92, 96-100, and 102-105 under 35 U.S.C. §103(a) based on the teachings of Purchase and Willars

Claims 2-8, 19, 21-37, 41-47, 51-57, 77-83, 96-97, and 102 depend from claim 1. Claims 10-11, 38-40, 48-50, 58-60, 84-86 depend from claim 9. Claim 87 depends from claim 12. Claims 14-15 and 88-90 depend from claim 13. Claims 17 and 91-92 depend from claim 16. Claim 100 depends from claim 98. Claims 103-105 depend from claim 99. Accordingly, claims 2-8, 10-11, 14-15, 17, 19, 21-60, 77-92, 96-97, 100, and 102-105 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicants respectfully request withdrawal of the rejections of claims 1-17, 19, 21-60, 77-92, 96-100, and 102-105 under 35 U.S.C. §103(a) and respectfully submit that claims 1, 9, 12-13, 16, and 98-99, and the claims that depend therefrom, are now in condition for allowance.

CONCLUSION


In conclusion, Applicants respectfully submit that the combination of Purchase and Willars would fail to disclose or suggest every feature recited in claims 1-17, 19, 21-60, 77-92, 96-100, and 102-113. The distinctions previously noted are more than sufficient to render the claimed invention non-obvious. It is therefore respectfully

requested that all of claims 1-17, 19, 21-60, 77-92, 96-100, and 102-113 be allowed, and this present application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal
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